**4th Grade**

**Mathematics**

**Instructional Game**

Monkeying Around with Multiplication

**Objectives**

For students to enjoy a review of multiplication by participating in a game.

**State Standards**

[CCSS.Math.Content.4.NBT.B.5](http://www.corestandards.org/Math/Content/4/NBT/B/5) Multiply a whole number of up to four digits by a one-digit whole number, and multiply two two-digit numbers, using strategies based on place value and the properties of operations. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models.

**Materials and Set Up**

* Monkeying Around with Multiplication game board
* Game pieces
* Die (one per game board)
* Paper
* Pencil
* Calculator

The classroom will not have to be rearranged for the implementation of this game. Students can choose floor space or may play the game while seated at their desks.

Students will be in groups of 2 (as suggested by the mentor) and will be paired using “pairing cards”.

**Introduction**

I will begin by telling the students that they are going to play “Monkeying Around with Multiplication”. The game will utilize skills they have gained during the previous week’s lesson concerning 1 digit X 2 and 3-digit multiplication and will be a review of these skills. I will explain the instructions to the students and then give the students an opportunity to ask any questions they may have about how to play the game. I will also explain the rules of the game.

Next, I will hand each student a “pairing” card while they are still seated at their desks. Pairing cards are sets of cards with pictures of opposites i.e., peanut butter on one card and jelly on another card. Once the cards have been distributed, the students will use the picture on their card and locate the student who is holding the opposite card. Use of the cards should deter any disagreements among students concerning favorites/friends.

After the students have located their partner, they will approach the table at the front of the room to collect the materials for game play.

**Directions & Rules**

*Directions*

* Both players put their game pieces on START
* To determine who plays first, both players roll the die. The person who rolls the highest number goes first.
* To Play: Roll the die.
* Move your game piece that number of spaces.
* Read the line in the square that matches the number you rolled.
* If there are instructions on that line, follow them. If there is a multiplication problem, solve it on your paper to determine if the answer on the game board is correct or incorrect. (Show your work)
* Use the calculator to verify the answer.
* If you answer correctly, you stay on that space until your next turn.
* If you answer incorrectly, go back to the space you were on when your turn began.
* The game ends with an exact roll of the die or from a line of instructions.

*Rules*

* Use a Level I voice
* Use the calculator for verification ONLY. (It can be taken away)
* Roll the die gently. The die should stay within arms reach of you at all times.
* Stay in your area for the duration of the game. No visiting other teams.

*Noise Level:* If the noise level rises above Level I (soft whisper) students will be given a warning. If the noise level does not improve, the student will be dismissed from the game and asked to return to his or her desk to complete a handout containing some of the multiplication problems from the game board.

*Helping with Answers:* Students are allowed to help their partner find answers and are encouraged to do so.

*Activity Level*: This game is meant to be played while seated and students will be expected to remain in their chosen areas until game-play is over. Students who stand/walk/run without permission will be given a warning. Any student who continues to stand/walk/run will be dismissed from the game and asked to return to his or her desk to complete a handout containing some of the multiplication problems from the game board.

*Winners:* There is no winner or loser. The game is created in such a way that there should be no ties—once the game is over it is simply over. There is no material reward, but each student will be verbally praised throughout game play and at the end of the game.

*Poor Sportsmanship:* Students who exhibit negative behavior during the game, either by put-downs or poor sportsmanship, will be given a warning. If a student continues to exhibit this type of behavior, he or she will be dismissed from the game and asked to return to their desk to complete a handout containing some of the multiplication problems from the game board. This kind of behavior will not be tolerated, and the student may be asked to pull a card (the classroom behavior system) if the teacher deems it necessary.

*Disputes:* Students will be instructed to clarify any disputes with me. There are several difficult multiplication problems on the game board and students may require scaffolding.

**Conclusion**

The gamewill end when one student reaches the final square on the game board. There should be enough time for the students to play the game several times. I will give the students a five-minute warning so that they have time to clean up their area and return the materials.

At the end of the game, I will ask the students if there were any problems on the game board that were particularly difficult. If any of the students reply, we will review the specific problem.

I will utilize a rhythmic clap to regain the students’ attention and to redirect them to their next activity.

**Reflection**

I feel that the students really enjoyed the game and it was a great review for them. As I walked around the room to gauge their progress, there were some questions about various problems presented on the game board. In these cases, I would assist the students in completing the problems by asking them questions related to the strategies they learned in class. This was an excellent way for the students to develop their own understanding of how multiplication works.

Game time was significantly less than I anticipated and most groups were able to play the game multiple times. Although they were happy to play again, they became somewhat restless by the end of their second round.

I could have managed the pairing of the students better. Having all of the students approach the table to collect the materials needed for game-play was boisterous and a little confusing. Next time I introduce this game, I will have the students remain in their seats and I will hand out all of the materials.

**Resources**

http://www.learn-with-math-games.com